5

- A process for preparing 5,6-dihydro-11Hdibenzo[a,d]cyclohept-/11-enes comprising reacting a dibenzosuberone or an aza derivative thereof with an aliphatic ketone in the presence of low valent titanium wherein said low valent titanium is generated by zinc.
- 2. A process as claimed in claim 1 wherein said dibenzosuberone or aza derivative thereof is of formula 10 I:

15

(wherein:

20

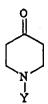
X denotes nitrogen or CH; and R^1 , R^2 , R^3 and R^4 which may be the same or different independently denote hydrogen or a halogen).

A process as claimed in claim 2 wherein R2 is a з. halogen.

- A process as claimed An claim 2 or 3 wherein R^1 , R^3 and R4 denote hydrogen.
- A process as claimed in any of claims 2, 3 or 4 wherein X is nitrogen.
- A process as claimed in any preceding claim in which the aliphatic ketone is cyclic.

35

- 7. A process as claimed in claim 6 wherein said cyclic aliphatic ketone is an optionally N-substituted piperidone.
- 5 8. A process as claimed in claim 7 wherein said piperidone is of formula II:



10

15

20

(wherein:

and the salts thereof.

Y denotes hydrogen, lower alkyl, CO_2R^5 , SO_2R^5 , $CON(R^5)_2$, $SO_2N(R^5)_2$, CO_2COR^5 or a N-protecting group; and

 R^5 is hydrogen, a C_{1-12} -alkyl group optionally substituted by one or more amino or C_{1-6} -alkylamino groups, a phenyl group optionally substituted by one or more halo or C_{1-6} -alkyl groups, a C_{7-12} -phenylalkyl group optionally substituted at the phenyl by one or more halo or C_{1-6} -alkyl groups, 2-piperidyl, 3-piperidyl or piperidyl substituted at the nitrogen atom by a C_{1-4} -alkyl group)

25

9. A process as claimed in claim 8 wherein Y is CO2Et.

10. A process as claimed/in any preceding claim wherein Ti is present in a molar ratio range 1.5:1 to 4:1 relative to the dibenzy suberone.

pub730

11. A process as claimed in claim 10 wherein Ti is present in a molar ratio range 2:1 to 3:1 relative to the dibenzosuberone.

35

12. A process as claimed in any preceding claim comprising the preparation of an intermediate diol of

Mb7 A3/

AMENDED SHE

. 5

15

25

formula III:

R₄
R₂
(III

- (wherein R_1 , R_2 , R_3 , R_4 and X are as defined in claim 2 and Y is as defined in claim 8).
 - 13. A process as claimed in any preceding claim wherein said low valent titanium consists essentially of Ti(II).
 - 14. A process as claimed in any preceding claim wherein low valent titanium is prepared in situ.
- 15. A process as claimed in claim 14 wherein low valent titanium is prepared by reacting a Ti(III) or Ti(IV) compound or complex with said zinc.
 - 16. A process as claimed in claim 15 wherein said titanium compound is titanium(III) chloride or titanium(IV) chloride or a complex thereof.
 - 17. A process as claimed in any preceding claim for preparing Loraradine.

ADD B3>

AMENDED SHEET